What is claimed is:

1. An optical sensor apparatus for effectively reducing a non-active gap, comprising:

an optical sensor having a first linear array of sensor segments and a second linear array of sensor segments separated by a first non-active gap having a first width;

a first optical fiber having a first end oriented toward a field of view and a second end oriented toward a sensor segment of said first linear array of sensor segments; and

a second optical fiber having a first end oriented toward said field of view and located a first distance, less than said first width, from said first end of said first optical fiber and a second end oriented toward a sensor segment of said second linear array of sensor segments, thereby enhancing optical congruence of said first linear array and second linear array in relation to each other.

2. The optical sensor apparatus of claim 1, wherein said optical sensor has a third linear array of sensor segments separated from said second linear array of sensor segments by a second non-active gap having a second width,

said optical sensor apparatus further comprising:

a third optical fiber having a first end oriented toward said field of view and located a third distance, less than said second width, from said first end of said second optical fiber and a second end oriented toward a sensor segment of said third linear array of sensor segments.

3. The optical sensor apparatus of claim 2, further comprising:

a first color filter positioned to filter light reaching said first linear array of sensor segments;

a second color filter, different from said first color filter, positioned to filter light reaching said second linear array of sensor segments;

a third color filter, different from said first color filter and said second color filter, positioned to filter light reaching said third linear array of sensor segments.

4. The optical sensor apparatus of claim 2, further comprising a first fiber optic faceplate configured to accommodate said first end of said first optical fiber and said first end of said second optical fiber.

5. The optical sensor apparatus of claim 1, wherein said first ends of said first and second optical fibers are arranged in a single column.

6. The optical sensor apparatus of claim 1, wherein said optical fibers are mounted within a block structure.

7. The optical sensor apparatus of claim 1, wherein said field of view is along a plane intersecting said first end of said first optical fiber and said first end of said second optical fiber.

8. The optical sensor apparatus of claim 1, wherein said optical sensor is a linear sensor.

9. The optical sensor apparatus of claim 1, wherein said optical sensor is a tri-linear sensor having three sensor elements.

10. The optical sensor apparatus of claim 1, wherein said optical sensor is at least one matrix sensor.

11. The optical sensor apparatus of claim 1, wherein said optical sensor comprises at least one linear array formed on a matrix sensor.

12. The optical sensor apparatus of claim 1, wherein said optical sensor comprises three linear arrays formed on a matrix sensor.

13. The optical sensor apparatus of claim 1, wherein said second end of said first optical fiber is mounted to said sensor segment of said first linear array of sensor segments and said second end of said second optical fiber is mounted to said sensor segment of said second linear array of sensor segments.

14. The optical sensor apparatus of claim 1, further comprising at least one lens, located between said field of view and said first ends of said first optical fiber and said second optical fiber.

15. An optical sensor apparatus for effectively reducing a non-active gap, comprising:

a tri-linear optical sensor having a first linear sensor element and a second linear sensor element separated by a first non-active gap having a first width and a third linear

sensor element separated from said second linear sensor element by a second non-active gap having a second width;

a first optical fiber having a first end oriented toward a field of view and a second end oriented toward a sensor segment of said first linear sensor element;

a second optical fiber having a first end oriented toward said field of view and located a first distance, less than said first width, from said first end of said first optical fiber and a second end oriented toward a sensor segment of said second linear sensor element;

a third optical fiber having a first end oriented toward said field of view and located a third distance, less than said second width, from said first end of said second optical fiber and a second end oriented toward a sensor segment of said third linear sensor element.

16. The optical sensor apparatus of claim 15, wherein said first optical fiber includes a plurality of first optical fibers and said second optical fiber includes a plurality of second optical fibers and said third optical fiber includes a plurality of third optical fibers.

17. The optical sensor apparatus of claim 15, wherein said first ends of said first, second and third optical fibers are arranged in a single column.

18. The optical sensor apparatus of claim 15, wherein said second end of said first optical fiber is mounted to said sensor segment of said first linear sensor element, said second end of said second optical fiber is mounted to said sensor segment of said second

linear sensor element and said second end of said third optical fiber is mounted to said sensor segment of said third linear sensor element.

19. An apparatus for effectively reducing a non-active gap of an optical sensor, comprising:

a first fiber optic faceplate configured to accommodate a plurality of optical fibers;

a second fiber optic faceplate configured to accommodate said plurality of optical fibers;

a first optical fiber of said plurality of optical fibers having a first end mounted to said first fiber optic faceplate and a second end mounted to said second fiber optic faceplate;

a second optical fiber of said plurality of optical fibers having a first end mounted to said first fiber optic faceplate a first distance, less than said non-active gap, from said first optical fiber and said second optical fiber having a second end mounted to said second fiber optic faceplate such that said second end of said first optical fiber and said second end of said second optical fiber are spaced to align with a first linear array and a second linear array, respectively, of said optical sensor.

20. The apparatus of claim 19, wherein said plurality of optical fibers includes a plurality of said first optical fibers and a plurality of said second optical fibers.

21. The apparatus of claim 19, further comprising a third optical fiber of said plurality of optical fibers having a first end mounted to said first fiber optic faceplate a distance from said first end of said second optical fiber less than said non-active gap, a

second end mounted to said second fiber optic faceplate such that said second end of said third optical fiber is located to align with a third linear array of said optical sensor.

22. The apparatus of claim 21, wherein said first ends of said first, second and third optical fibers are arranged in a single column.

23. The apparatus of claim 19, wherein said first ends of said first optical fiber and said second optical fiber are mounted normal to a plane formed by said first fiber optic faceplate and said second ends of said first optical fiber and said second optical fiber are mounted normal to a plane formed by said second fiber optic faceplate.

24. The apparatus of claim 19, further comprising said optical sensor mounted to said second fiber optic faceplate.

25. The apparatus of claim 24, wherein said optical sensor is a tri-linear CCD image sensor.

26. The apparatus of claim 24, wherein said optical sensor is at least one matrix sensor.

27. The apparatus of claim 24, wherein said optical sensor comprises at least one linear array formed on a matrix sensor.

28. The apparatus of claim 19, further comprising a plurality of color filters used with said plurality of optical fibers so as to separate colors provided to said arrays of said optical sensor.

29. An apparatus for effectively reducing a non-active gap of an optical sensor, comprising:

a first optical fiber and a second optical fiber mounted to each other such that a first end of said first optical fiber and a first end of said second optical fiber are oriented toward a field of view; and

a first spacer mounted between a second end of said first optical fiber and a second end of said second optical fiber to locate said second end of said first optical fiber and said second end of said second optical fiber further apart than said first end of said first optical fiber and said first end of said second optical fiber and to correspond to elements of an optical sensor.

30. The apparatus of claim 29, further comprising,

a second spacer; and

a third optical fiber having a first end oriented toward said field of view and a second end located such that said second end of said third optical fiber and said second end of said second optical fiber are further apart than said first end of said third optical fiber and said first end of said second optical fiber and to correspond to elements of an optical sensor; wherein said optical sensor is a tri-linear optical sensor.

31. The apparatus of claim 30, wherein said first ends of said first second and third optical fibers are arranged in a single column.

32. The apparatus of claim 29, further comprising a plurality of color filters used with said optical fibers so as to separate colors provided to said elements of said optical sensor.

33. The apparatus of claim 24, wherein said optical sensor is a tri-linear CCD image sensor.

34. The apparatus of claim 19, wherein said optical sensor is at least one matrix sensor.

35. The apparatus of claim 19, wherein said optical sensor comprises at least one linear array formed on a matrix sensor.

36. A method of effectively reducing a non-active gap of an optical sensor, comprising the steps of:

providing an optical sensor having a first linear sensor element and a second linear sensor element separated by a first non-active gap having a first width and a third linear sensor element separated from said second linear sensor element by a second non-active gap having a second width;

orienting a first end of a first optical fiber toward a field of view;

orienting a second end of said first optical fiber toward said first linear sensor element;

locating a first end of a second optical fiber a first distance, less than said first width, from said first end of said first optical fiber and oriented toward said field of view;

orienting a second end of said second optical fiber toward said second linear sensor element;

locating a first end of a third optical fiber a third distance, less than said second width, from said first end of said second optical fiber and oriented toward said field of view;

orienting a second end of said third optical fiber toward said third linear sensor element;

wherein optical congruence of said first linear sensor, said second linear sensor and said third linear sensor are enhanced in relation to each other.

37. The method of claim 36, further comprising the step of providing a plurality of color filters used with said optical fibers so as to separate colors provided to said elements of said optical sensor.

38. The method of claim 36, wherein said optical sensor is a tri-linear CCD image sensor.

39. The method of claim 36, wherein said optical sensor is at least one matrix sensor.

40. The method of claim 36, wherein said optical sensor comprises at least one linear array formed on a matrix sensor.

41. The optical sensor apparatus of claim 36, wherein said second end of said first optical fiber is mounted to said first linear sensor element, said second end of said second optical fiber is mounted to said second linear sensor element and said second end of said third optical fiber is mounted to said third linear sensor element.

42. An apparatus for effectively reducing a non-active gap of an optical sensor, comprising:

means for obtaining optical information from a field of view;

means for orienting said optical information to at least two linear sensor elements of at least one optical sensor so as to enhance an optical congruence capability of said optical sensor.

43. The apparatus of claim 42, further comprising means for positioning said means for obtaining in relation to said optical sensor.